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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/534,616

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Dirk Van Aken

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EXAMINER

SETO, JEFFREY K

ART UNIT

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2458

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/534,616	Applicant(s) AKEN ET AL.	
	Examiner Jeffrey Seto	Art Unit 2458	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☒ Claim(s) 1-3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-8 are pending.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file. Accordingly, the priority date of the present application is 11-13-2002.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 5-11-2005 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner. The listing of references in the Search Report is not considered to be an information disclosure statement (IDS) complying with 37 CFR 1.98. 37 CFR 1.98(a)(2) requires a legible copy of: (1) each foreign patent; (2) each publication or that portion which caused it to be listed; (3) for each cited pending U.S. application, the application specification including claims, and any drawing of the application, or that portion of the application which caused it to be listed including any claims directed to that portion, unless the cited pending U.S. application is stored in the Image File Wrapper (IFW) system; and (4) all other information, or that portion which caused it to be listed. In addition, each IDS must include a list of all patents, publications, applications, or other information submitted for consideration by the Office (see 37 CFR 1.98(a)(1) and (b)), and MPEP § 609.04(a),

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subsection I. states, "the list ... must be submitted on a separate paper." Therefore, the references cited in the Search Report have not been considered. Applicant is advised that the date of submission of any item of information or any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the IDS, including all "statement" requirements of 37 CFR 1.97(e). See MPEP § 609.05(a).

Claim Objections

4. Claims 1- 3 are objected to because of the following informalities:
 - a. Regarding claim 1, each of the following lacks antecedent basis:
 - i. "the private IPv4 source address" in line 5;
 - ii. "the IPv4 header" in line 5;
 - iii. "the IPv4 network" in line 7;
 - iv. "the Interface ID" in line 9; and,
 - v. "the 6to4 source address" in line 10.
 - b. Regarding claim 2, "the first network" in the last line, lacks antecedent basis.
 - c. Regarding claim 3, the following lack antecedent basis:
 - vi. "the IPv4 address part" in line 3; and,
 - vii. "the IPv6 header" in lines 3-4.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by B.

Carpenter, et al., Connection of IPv6 Domains via IPv4 Clouds (Network Working Group) (referred to herein as “Carpenter”).

6. Regarding claim 1, Carpenter teaches a method for supporting a 6to4 tunneling protocol across a network address translation mechanism comprising the steps of :

- receiving an outbound IPv6 packet encapsulated into an IPv4 packet (See page. 4, paragraph 1.1, lines 3-6), - translating the private IPv4 source address in the IPv4 header of the outbound packet into a public IPv4 source address (See p. 4, par. 1.1, line 13, and p. 5, par. 2; wherein the V4ADDR is the private address and the 6to4 address is the public address), - transmitting the translated packet over the IPv4 network (See p. 6, par. 3, lines 1-2); further comprising the step of: - storing an association of the private IPv4 address and the Interface ID value of the 6to4 source address for opposite address translation of inbound packets (See p. 8, par. 5.1, lines 10-19, and par. 5.3).

7. Regarding claim 2, Carpenter teaches receiving an inbound packet over the IPv4 network (See p. 9, lines 1-2); - determining whether the inbound packet encapsulates an IPv6 packet (See p. 9, lines 2-4); - in the affirmative, retrieving the Interface ID of the encapsulated IPv6 packet's destination address, and using the Interface ID to retrieve

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the corresponding stored private IPv4 address (See p. 13, par. 5.3, lines 5-8), and updating the destination address in the IPv4 header accordingly (See p. 13, par. 5.3, lines 9-19); - forwarding the modified 6to4 packet on the first network (See p. 14, lines 1-3).

8. Regarding claim 3, Carpenter teaches changing the IPv4 address part of the 6to4 source address in the IPv6 header of an outbound packet to the public IPv4 address (See p. 8, par. 5.1, lines 10-15); and changing the IPv4 address part of the 6to4 destination address of an inbound packet to the corresponding private IPv4 address (See p. 8, par. 5.1, lines 16-21).

9. Regarding claim 4, Carpenter teaches modifying fields at least of the IPv4 header, such as checksums, whose values depend on the 6to4 source address (See p. 7, lines 1-10).

10. Regarding claim 5, Carpenter teaches the step of storing the association of the Interface ID and the source address of the 6to4 packets of the first network and the step of modifying the destination address of inbound packets or the source address of outbound packets as a function of the Interface ID is carried out by an application level gateway assisting the network address translation mechanism (See p. 9, par. 5.2, line 7 to p. 10, line 3; wherein the 6to4 router is the gateway).

11. Regarding claim 6, Carpenter teaches changing the IPv4 part of the 6to4 address are carried out by an application level gateway assisting the network address translation mechanism (See p. 10, lines 2-3; wherein the 6to4 router is the gateway).

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12. Regarding claim 7, Carpenter teaches a device for supporting a 6to4 tunneling protocol across a network address translation mechanism, comprising: a network address translation mechanism for changing the private source address of an outbound IPv4 packet encapsulating an IPv6 packet into a public source address (See p. 4, par. 1.1, lines 3-6 & 13, and p. 5, par. 2; wherein the V4ADDR is the private address and the 6to4 address is the public address); further comprising an application for storing the private IPv4 addresses included in the 6to4 source address of a host of the IPv6 network, for outbound packets; and for updating the 6to4 destination address of an inbound packet with a stored private IPv4 address having same Interface ID as the 6to4 destination address (See p. 6, par. 3, lines 1-2, and p. 8, par. 5.1, lines 10-19).

13. Regarding claim 8, Carpenter teaches the application is further adapted to carry out additional processing of an outbound packet, wherein the additional processing consists in replacing the private IPv4 address part of an 6to4 source address of an outbound packet with the device's public IPv4 address (See p. 8, par. 5.1, lines 10-21).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Seto whose telephone number is (571)270-7198. The examiner can normally be reached on Monday thru Thursday and alt. Fridays, 9:30 AM-7 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph E. Avellino can be reached on (571) 272-3905. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JKS

1/21/2009

/Joseph E. Avellino/
Primary Examiner, Art Unit 2446